This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.(Original) A unitarily formed diverter valve assembly for diverting the flow of fluids in a liquid chromatography system comprising;

a valve body;

first, second, third, and fourth ports;

first, second, third and fourth chambers; and

first, second, third, fourth and fifth diverter valves;

wherein said first port is associated with said first chamber, said second port is associated with said second chamber, said third port is associated with said third chamber, and said fourth port is associated with said fourth chamber; and

wherein said first diverter valve is disposed between said first and said second chamber such that a first side of said first diverter valve is positioned in said first chamber and a second side of said first diverter valve is positioned in said second chamber, said second diverter valve is disposed between said second and said third chamber such that a first side of said second diverter valve is positioned in said second chamber and a second side of said second diverter valve is positioned in said third chamber, said third diverter valve is disposed between said third and said fourth chamber such that a first side of said third diverter valve is positioned in said third chamber and a second side of said third diverter valve is positioned in said fourth chamber, said fourth diverter valve is disposed between said fourth and said first chamber such that a first side of said for diverter valve is positioned in said fourth chamber and a second side of said fourth diverter valve is positioned in said first chamber, and said fifth diverter valve is disposed between said first and said third chamber such that a first side of said fifth diverter valve is positioned in said first chamber and a second side of said fifth diverter valve is position and in

said third chamber and wherein one of said first, second, third, fourth and fifth diverter valves is disposed at a predetermined highpoint in said valve body, relative to all other of said first, second, third, fourth and fifth diverter valves, and the other of said first, second, third, fourth and fifth diverter valves are disposed in said valve body at predetermined angles suitable for draining said valve assembly.

2.(Original) The diverter valve assembly of claim 1, wherein said valve body comprises an octahedral pyramid structure having:

a substantially planar, octagonally shaped base portion;

a substantially planar square top surface;

four distorted hexagonal side faces projecting downwardly from said square top surface; and,

four triangular faces rising perpendicularly from said base portion, said triangular faces being disposed between said four side faces.

3.(Original) The diverter valve assembly of claim 2, wherein said ports are disposed on said triangular faces.

4.(Original) The diverter valve assembly of claim 3, wherein said plurality of ports is equal to four ports.

5.(Original) The diverter valve assembly of claim 1, wherein at least two of said ports are connected to opposite sides of a chromatography column.

6.(Original) The diverter assembly of claim 1, wherein said predetermined angles are approximately 30° with respect to a base of the diverter valve assembly.

7.(Original) The diverter valve assembly of claim 1, further comprising a plurality of manual bonnets, each of said manual bonnets corresponding to one of said diverter valves which is disposed thereunder.

8.(Original) The diverter valve assembly of claim 7, wherein said manual bonnets operate to manually control the operation of said diverter valves.

9.(Currently Amended) The diverter valve assembly of claim 1, wherein fluid flowing in a first direction enters said valve assembly through said first port, passes through said first chamber, is directed across said first diverter valve into said second chamber, exits said valve assembly through said second port, reenters said valve assembly through said fourth port, passes through said fourth chamber, is directed across said third diverter valve, passes through said third chamber, and [exists] exits said valve assembly through said third port.

10.(Original) The diverter valve assembly of claim 9, wherein said second diverter valve operates to prevent fluid communication between said second and said third chamber, said fourth diverter valve operates to prevent fluid communication between said fourth and said first chamber, and said fifth diverter valve operates to prevent fluid communication between said first and said third chamber.

11.(Currently Amended) The diverter valve assembly of claim 1, wherein fluid flowing

in a second direction enters said valve assembly through said first port, passes through said first chamber, is directed across said fourth diverter valve into said fourth chamber, exits said valve assembly through said fourth port, reenters said valve assembly through said second port, passes through said second chamber, is directed across said second diverter valve, passes through said third chamber, and [exists] exits said valve assembly through said third port.

12.(Original) The diverter valve assembly of claim 11, wherein said first diverter valve operates to prevent fluid communication between said first and said second chamber, said third diverter valve operates to prevent fluid communication between said third and said fourth chamber, and said fifth diverter valve operates to prevent fluid communication between said first and said third chamber.

13.(Original) The diverter valve assembly of claim 1, wherein fluid flowing in a third direction enters said valve assembly through said first port, passes through said first chamber, is directed across said fifth diverter valve into said third chamber, and exits said valve assembly through said third port.

14.(Currently Amended) The diverter valve assembly of claim 13, wherein said first diverter valve operates to prevent fluid communication between said first and said second chamber, said second diverter valve operates to prevent fluid communication between said third and said second chamber, said fourth diverter valve operates to prevent fluid communication between said third and said fourth chamber, and said fourth diverter valve operates to prevent fluid communication between said first and said fourth chamber.

15.(Original) The valve assembly of claim 1, wherein said second port and said fourth port are connected to opposite ends of a chromatography column.

16.(Original) A diverter valve assembly for use in liquid chromatography comprising:

a unitarily formed valve body comprising an octahedral pyramid structure having: a substantially planar, octagonally shaped base portion; a substantially planar square top surface; four distorted hexagonal side faces projecting downwardly from said square top surface; and four triangular faces rising perpendicularly from said base portion, said triangular faces being disposed between said four side faces;

a plurality of ports in said valve body, at least one of said plurality of ports functioning as an inlet port for allowing a liquid to enter into said valve body, at least one other of said plurality of ports functioning as an outlet port for allowing said liquid to exit said valve body, and at least two other of said plurality of ports each operable in a first inlet mode and a second outlet mode respectively, with respect to said valve body;

a plurality of chambers in said valve body, each one of said chambers being associated with one of said ports;

a tortuous network of channels communicating between said ports in said valve body for directing the flow of said liquid through said valve body; and,

a plurality of diverter valves located in said valve body, said diverter valves operating to control the flow of said liquid in said valve body, one of said plurality of diverter valves disposed at a predetermined highpoint in said valve body, relative to all other of said plurality of diverter valves, and the other of said plurality of diverter valves disposed in said valve body at approximately 30° angles with respect to a base of the diverter valve assembly, suitable for draining said valve assembly, wherein actuation of a predetermined combination of said ports,

chambers, channels and diverter valves produces a smooth and unobstructed path for said liquid which substantially eliminates dead-legs in said valve assembly.